

IN THE CLAIMS (clean version):

2. (Six Times Amended) A recombinant vector derived from an adenovirus comprising at least one ITR and a packaging signal, the recombinant vector having a first insertion site for a nucleic acid sequence of interest, a second insertion site for functionally inserting a gene sequence encoding at least a part of a penton and/or hexon protein of a first adenovirus serotype, and a third insertion site for a gene sequence encoding a part of a fiber protein of a second adenovirus serotype, the second adenovirus serotype selected from the group consisting of serotypes 11, 14, 16, 21, 34, 35, and 50, a gene sequence encoding at least a part of a penton and/or hexon protein from the first adenovirus serotype inserted into the second insertion site, a gene sequence encoding the part of a fiber protein of the second adenovirus serotype inserted into the third insertion site, the gene sequence encoding the part of a fiber protein adapted to exhibit a desired tropism to a plurality of target cells in a host and fused to a tail region of a fiber of the adenovirus serotype from which the recombinant vector was derived.

33. (Twice Amended) A chimeric adenovirus comprising:
an adenoviral capsid derived from a first adenovirus serotype; and
a part of an adenoviral fiber derived from a second adenovirus serotype substituted for a corresponding part of a fiber of the capsid derived from the first adenovirus serotype, the second adenovirus serotype selected from the group consisting of serotypes 11, 14, 16, 21, 34, 35, and 50, wherein the part of the adenoviral fiber derived from the second adenovirus serotype is fused to a tail region of a fiber of the first adenovirus serotype.

35. (Twice Amended) A chimeric adenovirus comprising:
an adenoviral capsid derived from a first adenovirus serotype; and
a part of an adenoviral fiber derived from adenovirus serotype 35 substituted for a corresponding part of a fiber of the capsid derived from the first adenovirus serotype, the part of the adenoviral fiber derived from adenovirus serotype 35 fused to a tail region of a fiber of the first adenovirus serotype.

37. (Twice Amended) A method for producing a chimeric adenoviral particle having a capsid derived from a first adenovirus serotype exhibiting a desired tropism and antigenicity determined by a part of a fiber of a second adenovirus serotype, the second adenovirus serotype selected from the group consisting of serotypes 11, 14, 16, 21, 34, 35, and 50, the method comprising:

providing a recombinant vector derived from the first adenovirus serotype comprising at least one ITR, a packaging signal, an insertion site for a nucleic acid sequence of interest, and an insertion site for a gene sequence encoding a functional part of a fiber protein of the second adenovirus serotype;

inserting into the recombinant vector the gene sequence encoding the functional part of the fiber protein of the second adenovirus serotype, wherein the functional part of the fiber protein of the second adenovirus serotype is fused to a tail region of a fiber of the first adenovirus serotype;

transfecting said vector in a packaging cell; and
producing chimeric adenoviral particles.

40. (Twice Amended) A method for producing a chimeric adenoviral particle having a capsid derived from a first adenovirus serotype exhibiting a desired tropism and antigenicity determined by a part of a fiber derived from adenovirus serotype 35, the method comprising:

providing a recombinant vector derived from the first adenovirus serotype comprising at least one ITR, a packaging signal, an insertion site for a nucleic acid sequence of interest, and an insertion site for a gene sequence encoding a functional part of the fiber protein of adenovirus serotype 35;

inserting into the vector the gene sequence encoding the functional part of the fiber protein derived from adenovirus serotype 35, wherein the functional part of the fiber protein of the second adenovirus serotype is fused to a tail region of a fiber of the first adenovirus serotype;

transfecting said vector in a packaging cell; and
producing chimeric viral particles.

43. (Twice Amended) A recombinant vector derived from a first adenovirus serotype comprising:

at least one ITR;

a packaging signal;

a first insertion site for a nucleic acid sequence of interest;

a second insertion site for functionally inserting a gene sequence encoding a part of a fiber protein of a second adenovirus serotype, the second adenovirus serotype selected from the group consisting of serotypes 11, 14, 16, 21, 34, 35, and 50; and

a gene sequence encoding the part of the fiber protein of the second adenovirus serotype inserted in the second insertion site, the part of the fiber protein of the second adenovirus serotype exhibiting a desired tropism to a plurality of cells in a host and fused to a tail region of a fiber of the first adenovirus serotype.

46. (Twice Amended) A recombinant vector derived from a first adenovirus serotype comprising:

at least one ITR;

a packaging signal;

a first insertion site for a nucleic acid sequence of interest;

a second insertion site for functionally inserting a gene sequence encoding a part of a fiber protein of adenovirus serotype 35; and

a gene sequence encoding the part of the fiber protein of adenovirus serotype 35 inserted in the second insertion site, the part of the fiber protein of adenovirus serotype 35 exhibiting a desired tropism to a plurality of cells in a host and fused to a tail region of a fiber of the first adenovirus serotype.